

FILE 'USPAT' ENTERED AT 16:54:36 ON 08 JUL 1998

```
*****
*               W E L C O M E   T O   T H E               *
*           U . S .   P A T E N T   T E X T   F I L E       *
*****
```

=> s document processing system

```
          51074 DOCUMENT
          464803 PROCESSING
          1096951 SYSTEM
L1          302 DOCUMENT PROCESSING SYSTEM
              (DOCUMENT(W) PROCESSING(W) SYSTEM)
```

=> s l1 and folders or folder

```
          2244 FOLDERS
          4697 FOLDER
L2          4697 L1 AND FOLDERS OR FOLDER
```

=> s l2 and candidate

```
          14950 CANDIDATE
L3          42 L2 AND CANDIDATE
```

=> s l3 and 395/600/ccls or 395/2/ccls or 364/200/ccls

```
          0 395/600/CCLS
          0 395/2/CCLS
          1 364/200/CCLS
L4          1 L3 AND 395/600/CCLS OR 395/2/CCLS OR 364/200/CCLS
```

=> d l4 hit

TEXT DATA FOR PATENT 4,964,041 IS NOT AVAILABLE, SEE THE MICROFILE OR PAPER INSTEAD

=> s l3 and 364/200/ccls

```
          1 364/200/CCLS
L5          0 L3 AND 364/200/CCLS
```

=> d l3 1-42

1. 5,745,896, Apr. 28, 1998, Referential integrity in a relational database management system; Narayanan Vijaykumar, 707/100, 1, 4 [IMAGE AVAILABLE]

2. 5,742,508, Apr. 21, 1998, Air control supporting system; Yoichi Kusui, et al., 701/120; 73/178T; 342/36; 395/500, 670, 676 [IMAGE AVAILABLE]

=> s indexing subsystem

29774 INDEXING
16446 SUBSYSTEM
L5 5 INDEXING SUBSYSTEM
(INDEXING(W) SUBSYSTEM)

=> d hit

US PAT NO: 5,619,995 [IMAGE AVAILABLE] L5: 1 of 5

SUMMARY:

BSUM(50)

The image **indexing subsystem** may be used by itself and each of the subsystems may also be used with other digital motion video image implementations such as uncompressed digital video.

=> s metadata table

```
          98 METADATA
523173 TABLE
L11      3 METADATA TABLE
          (METADATA(W) TABLE)
```

=> d l11 hit

US PAT NO: 5,721,911 [IMAGE AVAILABLE]

L11: 1 of 3

DETDESC:

DETD(15)

Another example would be two **metadata table** objects which are derived from the same source. Given a set of data, for example, a financial ledger system, two data tables could be derived from this information. Two **metadata table** objects could be used to describe both tables and their derivations. These **metadata table** objects could be linked together to show a peer-to-peer relationship (both derived from the same source).

=> s index (P) managed files

150757 INDEX
9720 MANAGED
17410 FILES
12 MANAGED FILES
(MANAGED(W) FILES)
L12 10 INDEX (P) MANAGED FILES

=> d 1-10

1. 5,727,061, Mar. 10, 1998, Personal access management systems; William Cedric Johnson, et al., 380/25, 4, 23 [IMAGE AVAILABLE]
2. 5,696,825, Dec. 9, 1997, Personal access management system; William Cedric Johnson, et al., 380/25, 4 [IMAGE AVAILABLE]
3. 5,694,472, Dec. 2, 1997, Personal access management system; William Cedric Johnson, et al., 380/25, 4 [IMAGE AVAILABLE]
4. 5,692,049, Nov. 25, 1997, Personal access management system; William Cedric Johnson, et al., 380/25, 4 [IMAGE AVAILABLE]
5. 5,689,564, Nov. 18, 1997, Personal access management system; William Cedric Johnson, et al., 380/25, 4, 23 [IMAGE AVAILABLE]
6. 5,682,428, Oct. 28, 1997, Personal access management system; William Cedric Johnson, 380/23, 3, 4, 25 [IMAGE AVAILABLE]
7. 5,644,710, Jul. 1, 1997, Personal access management system; William Cedric Johnson, et al., 395/186, 188.01 [IMAGE AVAILABLE]
8. 5,619,574, Apr. 8, 1997, Personal access management system; William C. Johnson, et al., 380/25; 364/969, DIG.1, DIG.2; 380/23 [IMAGE AVAILABLE]
9. 5,610,980, Mar. 11, 1997, Method and apparatus for re-initializing a processing device and a storage device; William C. Johnson, et al., 380/4, 21, 25, 48 [IMAGE AVAILABLE]
10. 5,604,800, Feb. 18, 1997, Personal access management system; William C. Johnson, et al., 380/4; 38/3, 23, 25, 49 [IMAGE AVAILABLE]

=> d hit

US PAT NO: 5,727,061 [IMAGE AVAILABLE]

L12: 1 of 10

DETDDESC:

DETD(133)

FIG. 7d provides a more detailed flow diagram for process 192. Preferably, processor 30 performs the file management function by first selecting 270 one of the **managed files** 154-164, 170, and then retrieving 270 from table 370 the operational key file name and the file identification code corresponding to the chosen file. Processor 30 then uses the operational key file name as an **index** to retrieve 272 from

section 1160 of the RAM 40 the operational key c corresponding to the operational key e. If this operational key e is not found in the RAM 40, then it most likely means that the EKE is interacting with an improper UAS (i.e. a UAS other than the principal UAS). In such a case, processor 30 preferably halts operation.

> s attribute storage (p) database

12501 ATTRIBUTE
390912 STORAGE
54 ATTRIBUTE STORAGE
(ATTRIBUTE(W) STORAGE)
12065 DATABASE
L13 5 ATTRIBUTE STORAGE (P) DATABASE

=> d 1-5

1. 5,561,796, Oct. 1, 1996, Apparatus for searching for speech and moving images; Kenji Sakamoto, et al., 707/3; 364/282.1, 282.3, DIG.1; 386/96 [IMAGE AVAILABLE]
2. 5,230,073, Jul. 20, 1993, System and method for accessing and updating a continuously broadcasted stored database; Eric J. Gausmann, et al., 707/3; 364/228.1, 260, 271, 282.1, DIG.1 [IMAGE AVAILABLE]
3. 4,888,690, Dec. 19, 1989, Interactive error handling means in database management; Val J. Huber, 707/4; 364/234, 234.3, 236.8, 237.2, 237.3, 237.8, 237.81, 243, 243.2, 246, 246.3, 264, 264.1, 280, 280.9, 282.1, 282.3, 283.4, 285, 286, 286.1, 286.2, DIG.1; 395/185.1 [IMAGE AVAILABLE]
4. 4,805,099, Feb. 14, 1989, Retrieval of related records from a relational database; Val J. Huber, 707/102; 364/222.81, 225.4, 234, 234.3, 236.8, 237.2, 237.3, 237.8, 237.81, 243, 243.2, 246, 246.3, 280, 280.9, 282.1, 283.3, 283.4, 286, 286.1, 963, DIG.1 [IMAGE AVAILABLE]
5. 4,791,561, Dec. 13, 1988, Interactive construction of means for database maintenance; Val J. Huber, 707/1; 364/222.81, 222.82, 228.4, 234, 234.2, 236.8, 237.2, 282.1, 283.4, 286, 286.1, 286.2, 963, DIG.1 [IMAGE AVAILABLE]

=> d hit

US PAT NO: 5,561,796 [IMAGE AVAILABLE]

L13: 1 of 5

ABSTRACT:

A speech and moving image search apparatus includes an input section for inputting a command and a label information storage device for storing label information. A label **attribute storage** device is further included for storing label attributes, as well as a broader term storage device for storing broader terms of labels. A first search section extracts information on the data from the label information storage device. A **database** is also included for storing speech and moving images. A control section thereafter accesses desired data in the **database** based on the information extracted by the first search section. Finally, an output section is included for outputting the data.

SUMMARY:

BSUM(12)

According to the present invention, the above and other objects can be attained by a speech and moving image search apparatus comprising a

=> s relational database and file storage

```
      2642 RELATIONAL
      12065 DATABASE
      836 RELATIONAL DATABASE
          (RELATIONAL(W)DATABASE)
      39228 FILE
      390912 STORAGE
      821 FILE STORAGE
          (FILE(W)STORAGE)
L19      31 RELATIONAL DATABASE AND FILE STORAGE
```

=> d 1-31

1. 5,732,216, Mar. 24, 1998, Audio message exchange system; James Logan, et al., 395/200.33; 348/7, 13 [IMAGE AVAILABLE]
2. 5,726,883, Mar. 10, 1998, Method of customizing control interfaces for devices on a network; Jonathan D. Levine, et al., 364/188; 345/335, 349, 357, 970 [IMAGE AVAILABLE]
3. 5,721,827, Feb. 24, 1998, System for electrically distributing personalized information; James Logan, et al., 395/200.47; 348/13 [IMAGE AVAILABLE]
4. 5,717,951, Feb. 10, 1998, Method for storing and retrieving information on a magnetic storage medium via data blocks of variable sizes; Kan W. Yabumoto, 395/831 [IMAGE AVAILABLE]
5. 5,717,925, Feb. 10, 1998, Information catalog system with object-dependent functionality; Lloyd Harper, et al., 1/1 [IMAGE AVAILABLE]
6. 5,717,439, Feb. 10, 1998, Hierarchy of saving and retrieving control templates; Jonathan D. Levine, et al., 345/353 [IMAGE AVAILABLE]
7. 5,689,642, Nov. 18, 1997, Recipient prioritized communication channel profiles; Larry E. Harkins, et al., 395/200.37, 200.59 [IMAGE AVAILABLE]
8. 5,678,046, Oct. 14, 1997, Method and apparatus for distributing files on a **file storage** device; Thomas Cahill, et al., 1/1; 705/30; 707/1, 9, 10 [IMAGE AVAILABLE]
9. 5,678,042, Oct. 14, 1997, Network management system having historical virtual catalog snapshots for overview of historical changes to files distributively stored across network domain; Thomas Pisello, et al., 395/184.01, 200.54, 280; 707/7 [IMAGE AVAILABLE]
10. 5,657,461, Aug. 12, 1997, User interface for defining and automatically transmitting data according to preferred communication channels; Larry E. Harkins, et al., 345/333 [IMAGE AVAILABLE]
11. 5,630,122, May 13, 1997, Computerized report-based interactive database query interface; Craig A. Kaplan, et al., 707/4; 364/DIG.1 [IMAGE AVAILABLE]
12. 5,630,079, May 13, 1997, Document job key to tailor multifunctional user interfaces; Denise C. McLaughlin, 345/335, 333, 339, 347; 707/500